

ABSTRACT

A semiconductor transistor structure comprises a substrate having an epitaxial layer, a source region extending from the surface of the epitaxial layer, a drain region within the epitaxial layer, a channel located between the drain and source regions, and a gate arranged above the channel. The drain region comprises a first region for establishing a contact with an electrode, a second region being less doped than the first region being buried within the epitaxial layer and extending from the first region horizontally in direction towards the gate, a third region less doped than the second region and extending vertically from the surface of the epitaxial layer and horizontally from the second region until under the gate, a top layer extending from the surface of the epitaxial layer to the second region, and a bottom layer extending from the second region into the epitaxial layer.